

REMARKS

Claims 19-20, 24-39 and 41-49 are pending. Applicants hereby request non-entry of the previously filed unentered amendments and request that the amendments above be entered. The claims are amended and claims 21-23 and 40 are canceled without prejudice to or disclaimer of Applicants' right to pursue the canceled subject matter of these and any previously canceled or amended claims in a later application. No new matter has been added.

Claims 19, 35 and 36 are amended to clarify the method. Claim 19 is further amended to incorporate the subject matter of claims 21-23 and original claim 16. Claims 41-49 are added replacing canceled claims to more clearly recite the method of the invention. Support for the amendment and the new claims is found in original claims 1, 16, 35 and 36, previously presented claims 19 and 21-23, in the specification on page 3 lines 29-25, page 4 lines 18-24, page 10 lines 15-30 and in Example 8 on pages 14-16. No new matter has been added.

As amended, the claimed invention relates to a method for increasing the amino acid content of a plant cell, plant tissue, plant or progeny thereof comprising growing a stably transformed, transgenic plant cell, plant tissue, plant or progeny thereof comprising an ATP/ADP translocator gene; using said transformed plant cell, plant tissue, plant or progeny thereof as a useful plant or fodder plant with increased amino acid content; and a method of using a plant with modified amino acid content as a foodstuff (see specification page 10 lines 15-30 and original claim 16). The inventors have surprisingly found that, following the method of the invention, the transgenic plants exhibit on the one hand one or more amino acid simultaneously and on the other hand increased amino acid content in comparison with an untransformed plant. In a preferred embodiment, the content of essential amino acids is increased. Furthermore the total amount of free amino acids is increased by 7% as seen in the specification at page 5 lines 11-16 and in Example 8. These features allow for the direct use of the transformed plants as fodder plants with the advantage that supplementation with essential amino acids may not be required as seen in the specification at page 10 lines 21-30.


The references cited by the Examiner in previous actions do not disclose or mention a method for modifying or increasing the amino acid content of a plant. These references do not mention or disclose using the ATP/ADP translocator in transgenic plants for increasing amino acid content. Furthermore these references do not mention or disclose the content of essential amino acids or the content of free amino acids, or using these transgenic plants as a useful or fodder plant or foodstuff with increased amino acid content. None of the references previously cited by the Examiner mention or disclose amino acids, essential amino acids, or free amino acids.

CONCLUSION

In view of the above amendments and remarks, Applicants believe the pending application is in condition for allowance.

Applicants have attached herewith a Request for Continued Examination and Fee Transmittal form with this application. If any additional fee is due, please charge our Deposit Account No. 03-2775, under Order No. 13311-00001-US from which the undersigned is authorized to draw.

Respectfully submitted,

By 

Roberte M. D. Makowski, Ph.D.

Registration No.: 55,421

CONNOLLY BOVE LODGE & HUTZ LLP

1007 North Orange Street

P.O. Box 2207

Wilmington, Delaware 19899

(302) 658-9141

(302) 658-5614 (Fax)

Attorney for Applicants